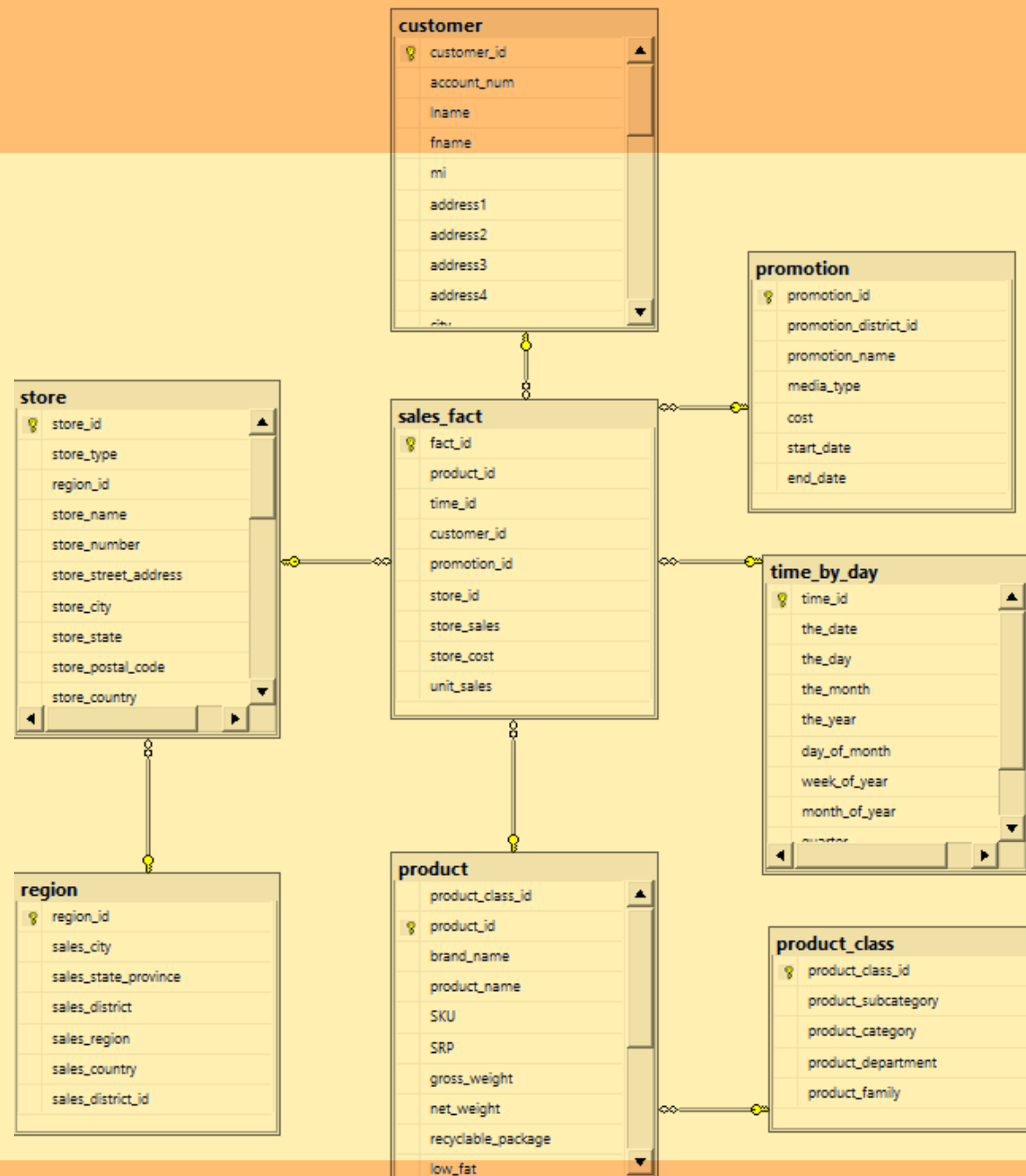


# Sample DW FoodMart

- RDBMS: Microsoft SQL Server
- Server:
- Login/pwd:
- GUI:
  - SQL Server Management Studio
    - Win only
  - Azure Data Studio
    - Win, Linux, Mac OS



## Exercises on lessons 2020-15 and 2020-16

- Write SQL queries to output:
  1. all triples `customer_id`, `the_year`, `month_of_the_year` in which the customer bought something in that month but nothing in the next month.
  2. the ratio of total sales to a customer in a year-month over the total sales to the customer in that year, by customer and year-month
  3. number of customers with total sales in the store lower or equal than 100 by store
  4. the top spending day of week, by customer
  5. the 10 top spending customers and the ratio of their spending over the total sales of the store, by `store_id`
  6. add to the previous query also the running total of the top k customers, for  $k=1, \dots, 10$
  7. add to the previous query also the delta between customer k and k+1, for  $k=1, \dots, 9$

## Exercises on lessons 2020-15 and 2020-16

- Write SQL queries to output:

8. number of customers with total sales in the store lower or equal than 100 by store

9. number of customers with at least one day with total sales in the store greater or equal than 100 by store

10. number of customers with no day with total sales in the store greater or equal than 100 (but with at least one sale in the store) by store

11. Number of customers who spent more than 50% of their total in the store by store

12. Number of customers who spent the largest amount of their total in the store by store